FOREST PEST MANAGEMENT

Report No. 82-3-31

Issued: 7/22/82

AERIAL DETECTION SURVEY OF FOREST INSECT AND DISEASE ACTIVITY, NATIONAL FORESTS . IN TEXAS

LAND OWNERSHIP OR SURVEY AREA: National Forests in Texas

STATE: Texas

AREA WITHIN SURVEY BOUNDARY: 619,600 acres

DATE: 7/12-7/15, 1982

PERCENT COVERAGE: 100%

AIRCRAFT: Cessna 172 & Cessna 210

CREW: Bob Bassett, FPM; Danny Dructor, Angelina RD; Jerald Nichols,

Yellow Pine RD; Vernon Ellisor, San Jacinto RD; and David

Norsworthy, Neches RD.

OBJECTIVES

To detect the presence of forest insect and disease activity within all the Texas National Forests. Special emphasis was placed upon delineating areas of red and fading pine trees suspected as infestations of southern pine beetle.

SURVEY RESULTS

<u>Angelina National Forest</u> (7/13/82) - a total of 15 spots of red and fading pine trees, ranging in size from three to twenty-five trees, were located (see Table 1). One of these spots had previously been verified as a southern pine beetle infestation by District personnel, although no active brood were present. Some of the spots appeared currently active as indicated by the presence of "faders."

Sabine National Forest (7/13/82) - Yellow Pine Ranger District personnel had already flown, located, and were salvaging infested timber at the time of the aerial survey. The District was surveyed long enough to get size estimates for the District flight maps which showed spot locations only. Populations of southern pine beetle appear to be at an outbreak level (see Table 2).

<u>Tenaha Ranger District</u> - although in close proximity to the Yellow Pine outbreak, no significant beetle activity was located on the Tenaha Ranger District (see Table 2).

Report No. 82-3-31 Issued: 7/22/82

Sam Houston National Forest - San Jacinto Ranger District: No significant activity was located (see Table 3). The only two spots located were suspected to have resulted from oil spills. Raven Ranger District: A possible increase in southern pine beetle populations was located on the eastern end of this district (see Table 3). Some of the spots looked very recent, as indicated by the presence of "faders" within the spots. Also, a few acres of defoliation was located on the southern end of the district on the edge of Lake Conroe.

Davy Crockett National Forest - Neches Ranger District and Trinity Ranger District: No significant activity was found on either district (see Table 4).

SURVEY CONCLUSIONS

Angelina National Forest - This forest should be reflown later this summer by district personnel if field checks from our aerial data reveal active southern pine beetle populations.

Sabine National Forest - (1) Yellow Pine Ranger District - This district has been scheduled to be reflown by district personnel for suppression purposes later this summer. (2) Tenaha Ranger District - should be reflown later this summer since it is adjacent to the Yellow Pine District outbreak.

Sam Houston National Forest - (1) San Jacinto Ranger District - should be reflown later this summer if field checks on the adjacent Raven Ranger District reveal active southern pine beetle activity. (2) Raven Ranger District - should be reflown later this summer if field checks of currently located spots prove that there is active southern pine beetle.

<u>Davy Crockett National Forest</u> - Neches and Trinity Ranger Districts - should not be reflown until next summer, unless indicated differently by routine field observations.

For additional information, contact:

USDA Forest Service FPM
3620 Interstate 85, N.E. or
Northgate Office Park, Room 2103
Doraville, GA 30340
Telephone: 404/221-4796

USDA Forest Service FPM 2500 Shreveport Highway Pineville, LA 71360 Telephone: 318/473-7280

Table 1: Summary of Aerial Survey Data, Angelina National Forest, 7/12/82

	Infestation Size (# Trees)											
Ownership Federal		3-5 Spots : Trees		6-20 Spots : Trees		21-50 Spots : Trees		50+ Spots : Trees		l Trees		
Angelina RD	7	26	6	65	2	50	0	0	15	41		

Table 2: Summary of Aerial Survey Data, Sabine National Forest, 7/13/82

:	Infestation Size (# Trees)											
Ownership: Federal	3-5 Spots : Trees		6-20 Spots : Trees		21-50 Spots : Trees		50+ Spots : Trees		Total Spots : Trees			
Yellow Pine R	9	39	8	120	11	440	8	500	36	940		
Tenaha RD	3	12	0	0	0	0	0	0	3	12		

Table 3: Summary of Aerial Survey Data, Sam Houston National Forest

	Infestation Size (# Trees)											
Ownership: Federal	3-5 Spots : Trees		6-20 Spots : Trees		21-50 Spots : Trees		50+ Spots : Trees		Total Spots : Trees			
San Jacinto F	D 0	0	1	12	1	25	0	0	2	37		
Raven RD	7	29	5	7 5	0	0	0	0	12	104		

Table 4: Summary of Aerial Survey Data, Davy Crockett National Forest, 7/15/82

Ownership: Federal		Infestation Size (# Trees)											
	3-5 Spots : Trees		6-20 Spots : Trees		21-50 Spots : Trees		50+ Spots : Trees		Total Spots : Trees				
Neches RD	1	3	0	0	0	0	0	0	1	3			
Trinity RD	1	5	1	10	0	0	0	0	2	15			